MULTIMEDIA UNIVERSITY

STUDENT ID NO

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

# MULTIMEDIA UNIVERSITY

# FINAL EXAMINATION

**TRIMESTER 2, 2022/2023 (TERM ID 2220)**

## BAC1624 – MANAGEMENT ACCOUNTING I

(All sections/Groups)

05 JULY 2023
9.00 a.m – 12.00 p.m
(3 Hours)

---

## INSTRUCTIONS TO STUDENT

1. This question paper consists of 6 pages excluding the cover page with 5 questions only.
2. Attempt **ALL** questions. The distribution of the marks for each question is given.
3. Please write all your answers in the Answer Booklet provided.

## QUESTION 1

Job cost sheets for Sandhill Manufacturing are as follows:

| Job No 210 | | | Quantity: 1500 |
|---|---|---|---|
| **Date** | **Direct Materials** | **Direct Labor** | **Manufacturing Overhead** |
| July 1 | 10,800 | 9,600 | 14,400 |
| 8 | 10,200 | | |
| 10 | | 12,000 | |
| 15 | 6,600 | | |
| 25 | | 24,000 | |

| Job No 211 | | | Quantity: 1,200 |
|---|---|---|---|
| **Date** | **Direct Materials** | **Direct Labor** | **Manufacturing Overhead** |
| July 1 | 6,000 | 7,200 | 10,800 |
| 10 | 10,800 | | |
| 15 | | 9,600 | |
| 20 | 8,400 | | |
| 27 | | 14,400 | |

**Required:**

(a) Calculate the balance in Work in Process Inventory on July 1 if these were the only unfinished job?

(4 marks)

(b) Determine the predetermined overhead rate in June if overhead was applied on the basis of direct labour cost?

(3 marks)

(c) If July is the start of a new fiscal year and the overhead rate is 20% higher than in the preceding year, how much overhead should be applied to Job 210 in July?

(5 marks)

(d) Assuming Job 210 is complete, what is the total and unit cost of the job? Calculate.

(4 marks)

(e) Assuming Job 211 is the only unfinished job on July 31, what is the balance in Work in Process Inventory on this date? Calculate.

(4 marks)

**(Total: 20 marks)**

**Continued ...**

## QUESTION 2

Polkan Company manufactures pens under two main departments. Materials are added at the beginning of the production process, and conversion costs are incurred uniformly. Production and cost data for the first department for July 2022 are as follows:

| **Production Data** | **Units** | **Percent Complete** |
|---|---|---|
| Work in process units, July 1 | 600 | 60% |
| Units started into production | 1,500 | |
| Work in process units, July 31 | 200 | 40% |

| **Cost Data** | |
|---|---|
| *Work in process, July 1* | |
| Materials | 800 |
| Conversion costs | 1450 |
| *Costs added during July* | |
| Direct materials | 450 |
| Direct labor | 1,600 |
| Manufacturing overhead | 1,300 |

**Required:**

(a) Calculate the equivalent units of production for materials and conversion costs.
(5 marks)

(b) Calculate the unit costs of production for materials and conversion costs.
(5 marks)

(c) Calculate the assignment of costs to units completed and transferred out and to work in process at the end of the accounting period.
(10 marks)

**(Total: 20 marks)**

**Continued ...**

## QUESTION 3

### Part A

Martinez Service has over 200 auto-maintenance service outlets nationwide. It provides primarily two lines of service: oil changes and brake repair. Oil change-related services represent 75% of its sales and provide a contribution margin ratio of 20%. Brake repair represents 25% of its sales and provides a 60% contribution margin ratio. The company's fixed costs are RM12,240,000 (or RM61,200 per service outlet).

**Required:**

(a) Calculate the dollar amount of each type of service that the company must provide in order to break even.

(4 marks)

(b) The company has a desired net income of RM43,200 per service outlet. What is the dollar amount of each type of service that must be provided by each service outlet to meet its target net income? Calculate.

(2 marks)

**Continued ...**

## Part B

Cullumber Electronix sells computer tablets and MP3 players. The business is divided into two divisions along product lines. CVP income statements for a recent quarter's activity are presented below.

| | Tablet Division (RM) | MP3 Player Division (RM) | Total (RM) |
|---|---|---|---|
| Sales | 787,500 | 462,500 | 1,250,000 |
| Variable costs | 574,875 | 254,375 | 829,250 |
| Contribution margin | 212,625 | 208,125 | 420,750 |
| Fixed costs | | | 138,006 |
| **Net income** | | | **282,744** |

**Required:**

(a) Determine the sales mix percentage based on sales Ringgit Malaysia and contribution margin ratio for each division.

(8 marks)

(b) Calculate the company's weighted-average contribution margin ratio.

(2 marks)

(c) Calculate the company's break-even point in sales Ringgit Malaysia.

(2 marks)

(d) Determine the sales level in Ringgit Malaysia for each division at the break-even point.

(2 marks)

**(Total: 20 marks)**

**Continued ...**

## QUESTION 4

Cullumber Batteries is a division of Enterprise Corporation. The division manufactures and sells a long-life battery used in a wide variety of applications. During the coming year, it expects to sell 37,800 units for RM30 per unit. Nyota Uthura is the division manager. She is considering producing either 37,800 or 45,360 units during the period. Other information is presented in the schedule.

**Division Information for 2022**

| | |
|---|---|
| Beginning inventory | 0 |
| Expected sales in units | 37,800 |
| Selling price per unit | RM30 |
| Variable manufacturing costs per unit | RM12 |
| Fixed manufacturing overhead costs (total) | RM453,600 |
| Fixed manufacturing overhead costs per unit: | |
| Based on 37,800 units | RM12 per unit (RM453,600 ÷ 37,800) |
| Based on 45,360 units | RM10 per unit (RM453,600 ÷ 45,360) |
| Total manufacturing costs per unit: | |
| Based on 37,800 units | RM24 per unit (RM12 variable + RM12 fixed) |
| Based on 45,360 units | RM22 per unit (RM12 variable + RM10 fixed) |
| Variable selling and administrative expenses per unit | RM2 |
| Fixed selling and administrative expenses (total) | RM42,000 |

**Required:**

(a) Prepare an absorption costing income statement, with one column showing the results if 37,800 units are produced and one column showing the results if 45,360 units are produced.

(7 marks)

(b) Prepare a variable costing income statement, with one column showing the results if 37,800 units are produced and one column showing the results if 45,360 units are produced.

(8 marks)

(c) What are some of the benefits to a manager from using variable costing instead of absorption costing for internal decision making?

(5 marks)

**(Total: 20 marks)**

**Continued ...**

## QUESTION 5

Sunland Corporation accumulates the following data relative to jobs started and finished during the month of June 2022.

| Costs and Production Data | Actual | Standard |
|---|---|---|
| Raw materials unit cost | RM2.10 | RM2 |
| Raw materials units | 11,300 | 10,900 |
| Direct labor payroll | RM177,310 | RM171,760 |
| Direct labor hours | 14,900 | 15,200 |
| Manufacturing overhead incurred | RM201,700 | |
| Manufacturing overhead applied | | RM205,200 |
| Machine hours expected to be used at normal capacity | | 41,500 |
| Budgeted fixed overhead for June | | RM62,250 |
| Variable overhead rate per machine hour | | RM3.00 |
| Fixed overhead rate per machine hour | | RM1.50 |

Overhead is applied based on standard machine hours. Three hours of machine time are required for each direct labour hour. The jobs were sold for RM452,000. Selling and administrative expenses were RM37,800. Assume that the amount of raw materials purchased equalled the amount used.

**Required:**

(a) Compute all the variances for (1) direct materials and (2) direct labour.

(18 marks)

(b) What circumstances may cause the purchasing department to be responsible for both an unfavourable materials price variance and an unfavourable materials quantity variance? Explain.

(2 marks)

**(Total: 20 marks)**

**End of Paper**